



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,293	06/25/2003	Harmeet Singh	LAM2P410	4867

7590

04/19/2006

Michael L. Gencarella, Esq.
Martine & Penilla, LLP.
Suite 170
710 Lakeway Drive
Sunnyvale, CA 94085

EXAMINER

KORNAKOV, MICHAIL

ART UNIT

PAPER NUMBER

1746

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/607,293

Applicant(s)

SINGH ET AL.

Examiner

Michael Kornakov

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15, 17 and 19-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15, 17, 19-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/04/2006 has been entered.
2. Claim 15 is amended reciting that the silicon containing coating is a non-fluorine containing compound including one of bromine and chlorine. Claims 23-25 are cancelled.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. The abstract of the disclosure stands objected to because it recites "A method for providing substantially similar chamber condition", however the instant claims are related to processing chamber. Applicants are also reminded of the proper format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words since the space provided for the abstract on the computer tape used by the printer is limited. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need

for consulting the full patent text for details. Therefore, appropriate correction of the Abstract is required. See MPEP 1 608.01(b).

5. Claim 22 stands objected to because of the following informalities: claim 22 recites "The semiconductor processing chamber of **claim 1**". However, claim 1 was cancelled by Applicants. Therefore, appropriate correction is required. For examination purposes it is assumed that claim 22 depends on claim 15.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 15 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 15 recites that "the silicon containing coating is a **non-fluorine** containing compound including one of bromine and chlorine", thus introducing a negative limitation into the claim. Any claim containing a negative limitation, which does not have basis in the original disclosure should be rejected under 35 U.S.C. 112, first paragraph as failing to comply with the written description requirement. Negative limitations which do not appear in the specification as originally

Art Unit: 1746

filed, and which introduce new concepts violate the description requirement of 35 USC 112, first paragraph, consult *Ex parte Grasselli*, 231 USPQ 393 (Bd. App. 1983).

7. Claims 15, 17, 19-22 are rejected under 35 U.S.C. 103(a) as being obvious over Koemtzopoulos et al (U.S. 6,071,573).

The teaching of Koemtzopoulos was previously discussed and is incorporated here. The silicon containing coating of Koemtzopoulos composed of silicon, oxygen and fluorine. Koemtzopoulos remains silent about silicon containing coating containing silicon, oxygen and chlorine or bromine. However, fluorine, chlorine and bromine represent halogens of the same group of periodic table, having the same structure of the outermost level, and therefore their functionality in the coating is expected to be prima facie the same. Structural similarities have been found to support a prima facie case of obviousness, see MPEP 2141.01 (A). Besides, Koemtzopoulos teaches that embodiments of his teaching should be regarded as illustrative rather than restrictive and that variations may be made in those embodiments by workers skilled in the art. Therefore, since the silicon containing coating of Koemtzopoulos includes a halogen, such as fluorine and since the teaching of Koemtzopoulos is not restrictive, one skilled in the art would have found obvious to utilize chlorine or bromine as an ingredient of silicon containing chamber coating in lieu of fluorine since chlorine or bromine are expected to exhibit the same functional behavior and in order to avoid contamination with fluorine containing species while processing substrates sensitive to fluorine containing residues in the processing chamber of Koemtzopoulos.

Response to Arguments

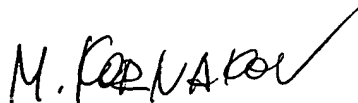
8. Applicants' indication with regard to rejection of claims 23 and 25 as being obvious over Koemtzopoulos is acknowledged with appreciation.

In the remarks Applicants require to provide motivation in order to use the teaching of Koemtzopoulos for obviousness type rejection. Such motivation is provided above in this office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Kornakov whose telephone number is (571) 272-1303. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael Kornakov
Primary Examiner
Art Unit 1746

Application/Control Number: 10/607,293
Art Unit: 1746

Page 6

04/17/2006